

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P565045

Luminaire Tested: **SQ4-PW1-125U-075D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565045  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-125U-075D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20340.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

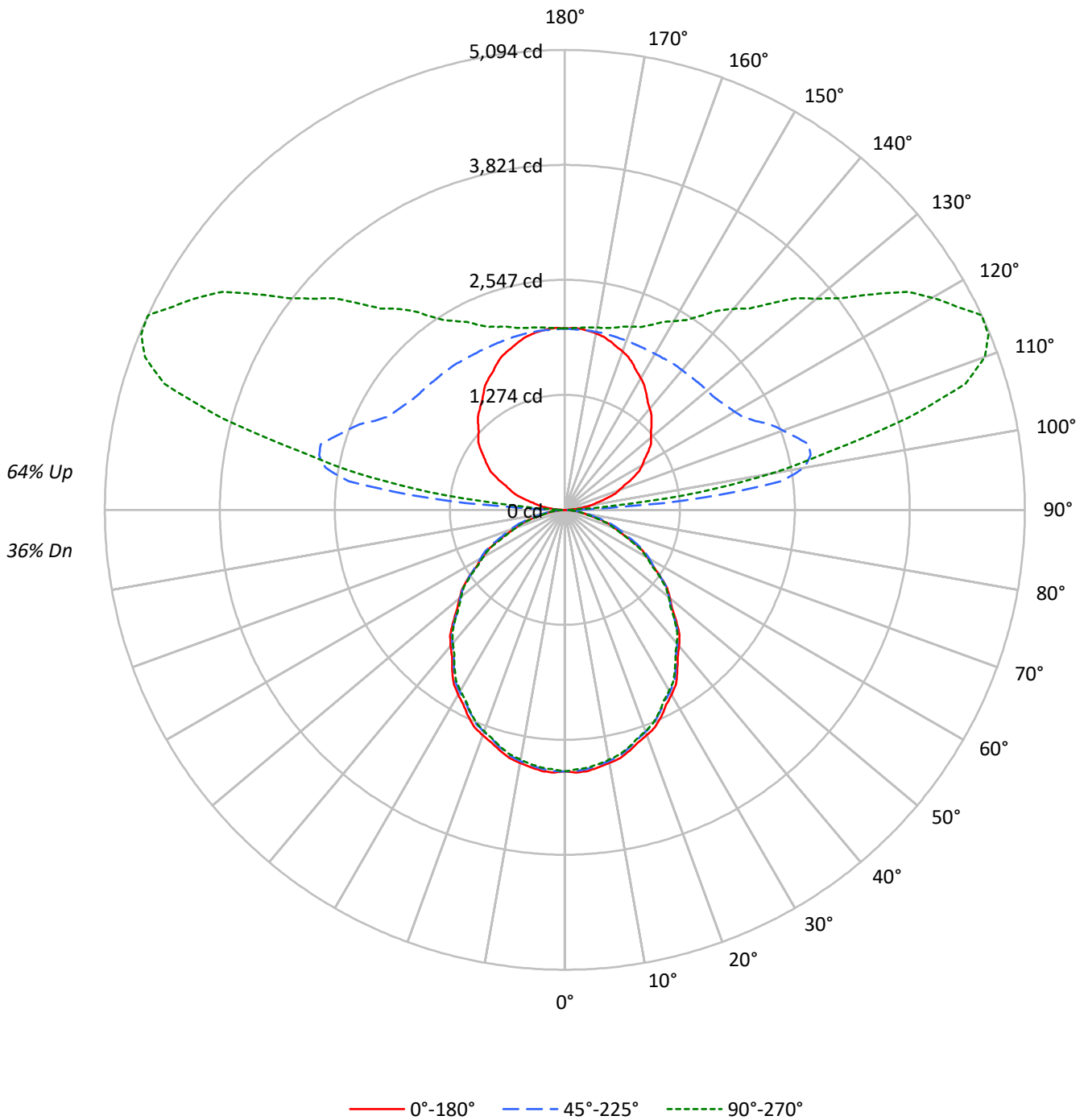
Input Watts (W): 172.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    | 20 |    |
| RC  | 80  |     |     |     | 70 |    |    |    | 50 |    |    |    | 30 |    |    |    | 10 | 0  |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 59 | 59 | 59 | 44 | 44 | 44 | 36 |
| 1   | 95  | 91  | 87  | 83  | 86 | 82 | 79 | 76 | 66 | 64 | 62 | 52 | 50 | 49 | 39 | 38 | 37 | 31 |
| 2   | 86  | 79  | 73  | 68  | 78 | 72 | 67 | 62 | 58 | 55 | 52 | 46 | 43 | 41 | 34 | 32 | 31 | 26 |
| 3   | 79  | 70  | 62  | 57  | 71 | 63 | 57 | 52 | 51 | 47 | 43 | 40 | 37 | 35 | 30 | 28 | 27 | 22 |
| 4   | 72  | 61  | 54  | 48  | 65 | 56 | 49 | 44 | 46 | 41 | 37 | 36 | 33 | 30 | 27 | 25 | 23 | 19 |
| 5   | 66  | 55  | 47  | 41  | 60 | 50 | 43 | 38 | 41 | 36 | 32 | 32 | 29 | 26 | 24 | 22 | 20 | 16 |
| 6   | 61  | 49  | 41  | 35  | 55 | 45 | 38 | 33 | 37 | 31 | 28 | 29 | 25 | 23 | 22 | 19 | 18 | 14 |
| 7   | 56  | 44  | 36  | 31  | 51 | 40 | 34 | 29 | 33 | 28 | 24 | 26 | 23 | 20 | 20 | 17 | 16 | 13 |
| 8   | 52  | 40  | 32  | 27  | 47 | 37 | 30 | 25 | 30 | 25 | 21 | 24 | 20 | 18 | 18 | 16 | 14 | 11 |
| 9   | 48  | 36  | 29  | 24  | 44 | 33 | 27 | 22 | 28 | 23 | 19 | 22 | 18 | 16 | 17 | 14 | 13 | 10 |
| 10  | 45  | 33  | 26  | 22  | 41 | 31 | 24 | 20 | 25 | 20 | 17 | 20 | 17 | 14 | 16 | 13 | 11 | 9  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8908 | 8908 | 8908 |
| 5°  | 8966 | 8895 | 8856 |
| 10° | 8894 | 8823 | 8775 |
| 15° | 8800 | 8703 | 8670 |
| 20° | 8695 | 8561 | 8545 |
| 25° | 8574 | 8418 | 8392 |
| 30° | 8392 | 8265 | 8211 |
| 35° | 8154 | 8039 | 7991 |
| 40° | 7900 | 7777 | 7746 |
| 45° | 7592 | 7492 | 7459 |
| 50° | 7278 | 7216 | 7168 |
| 55° | 6938 | 6938 | 6828 |
| 60° | 6514 | 6640 | 6405 |
| 65° | 5961 | 6259 | 5813 |
| 70° | 5255 | 5760 | 5117 |
| 75° | 4488 | 5156 | 4367 |
| 80° | 3480 | 4339 | 3526 |
| 85° | 2251 | 3331 | 2971 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 272.8   | 1.3       |
| 10°-20°   | 770.1   | 3.8       |
| 20°-30°   | 1142.3  | 5.6       |
| 30°-40°   | 1336.6  | 6.6       |
| 40°-50°   | 1330.6  | 6.5       |
| 50°-60°   | 1149.0  | 5.6       |
| 60°-70°   | 827.1   | 4.1       |
| 70°-80°   | 433.7   | 2.1       |
| 80°-90°   | 112.2   | 0.6       |
| 90°-100°  | 939.5   | 4.6       |
| 100°-110° | 2530.9  | 12.4      |
| 110°-120° | 2656.1  | 13.1      |
| 120°-130° | 2155.4  | 10.6      |
| 130°-140° | 1690.4  | 8.3       |
| 140°-150° | 1297.8  | 6.4       |
| 150°-160° | 933.1   | 4.6       |
| 160°-170° | 570.1   | 2.8       |
| 170°-180° | 192.2   | 0.9       |
| 0°-30°    | 2185.1  | 10.7      |
| 0°-40°    | 3521.8  | 17.3      |
| 0°-60°    | 6001.4  | 29.5      |
| 0°-90°    | 7374.5  | 36.3      |
| 90°-120°  | 6126.5  | 30.1      |
| 90°-150°  | 11270.0 | 55.4      |
| 90°-180°  | 12965.0 | 63.7      |
| 0°-180°   | 20340.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2897 | 2897  | 2897 | 2897  | 2897 |      |
| 5°   | 2904 | 2872  | 2881 | 2874  | 2869 | 275  |
| 15°  | 2764 | 2729  | 2733 | 2728  | 2723 | 779  |
| 25°  | 2527 | 2484  | 2481 | 2466  | 2473 | 1162 |
| 35°  | 2172 | 2142  | 2141 | 2121  | 2128 | 1358 |
| 45°  | 1746 | 1731  | 1723 | 1718  | 1715 | 1347 |
| 55°  | 1294 | 1291  | 1294 | 1276  | 1274 | 1154 |
| 65°  | 819  | 844   | 860  | 826   | 799  | 812  |
| 75°  | 378  | 413   | 434  | 405   | 368  | 405  |
| 85°  | 64   | 84    | 94   | 89    | 84   | 84   |
| 90°  | 5    | 15    | 31   | 33    | 33   | 12   |
| 95°  | 143  | 511   | 1540 | 788   | 545  | 150  |
| 105° | 468  | 728   | 2799 | 4188  | 3930 | 492  |
| 115° | 826  | 1012  | 2331 | 4504  | 5094 | 813  |
| 125° | 1128 | 1296  | 2093 | 3537  | 4163 | 1007 |
| 135° | 1359 | 1516  | 2034 | 2854  | 3231 | 1049 |
| 145° | 1571 | 1694  | 2008 | 2440  | 2620 | 985  |
| 155° | 1783 | 1848  | 1990 | 2189  | 2259 | 821  |
| 165° | 1934 | 1957  | 1998 | 2078  | 2088 | 545  |
| 175° | 2011 | 2008  | 2001 | 2029  | 2024 | 191  |
| 180° | 2008 | 2008  | 2008 | 2008  | 2008 |      |

TEST NUMBER: P565045

CATALOG NUMBER: SQ4-PW1-125U-075D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2896.6 | 2896.6 | 2896.6 | 2896.6 | 2896.6 |
| 2.5°   | 2913.0 | 2889.0 | 2896.6 | 2890.2 | 2876.2 |
| 5°     | 2904.3 | 2871.9 | 2881.3 | 2873.6 | 2868.6 |
| 7.5°   | 2874.7 | 2844.8 | 2851.7 | 2843.5 | 2840.5 |
| 10°    | 2848.2 | 2818.2 | 2825.2 | 2814.9 | 2809.9 |
| 12.5°  | 2817.5 | 2785.6 | 2792.5 | 2782.2 | 2779.2 |
| 15°    | 2763.9 | 2729.0 | 2733.3 | 2728.1 | 2723.1 |
| 17.5°  | 2701.7 | 2666.2 | 2667.0 | 2658.8 | 2657.8 |
| 20°    | 2656.7 | 2619.3 | 2615.9 | 2605.8 | 2610.8 |
| 22.5°  | 2607.7 | 2568.3 | 2564.9 | 2550.7 | 2557.7 |
| 25°    | 2526.6 | 2484.2 | 2480.7 | 2465.5 | 2473.0 |
| 27.5°  | 2432.7 | 2390.7 | 2390.8 | 2369.6 | 2377.5 |
| 30°    | 2363.3 | 2323.3 | 2327.5 | 2302.2 | 2312.2 |
| 32.5°  | 2289.8 | 2253.8 | 2256.1 | 2230.8 | 2240.8 |
| 35°    | 2171.8 | 2141.9 | 2141.2 | 2121.0 | 2128.5 |
| 37.5°  | 2051.4 | 2024.9 | 2020.8 | 2009.1 | 2011.1 |
| 40°    | 1967.7 | 1945.2 | 1937.1 | 1929.4 | 1929.4 |
| 42.5°  | 1879.9 | 1859.4 | 1851.3 | 1845.6 | 1843.6 |
| 45°    | 1745.6 | 1730.7 | 1722.7 | 1717.5 | 1715.0 |
| 47.5°  | 1612.9 | 1599.0 | 1592.0 | 1588.4 | 1585.9 |
| 50°    | 1521.1 | 1511.1 | 1508.3 | 1500.6 | 1498.1 |
| 52.5°  | 1429.2 | 1423.2 | 1420.5 | 1410.7 | 1408.3 |
| 55°    | 1293.9 | 1291.4 | 1293.9 | 1276.0 | 1273.5 |
| 57.5°  | 1153.0 | 1157.0 | 1165.3 | 1141.2 | 1135.2 |
| 60°    | 1059.1 | 1069.1 | 1079.5 | 1051.2 | 1041.3 |
| 62.5°  | 963.2  | 979.1  | 993.8  | 961.3  | 947.3  |
| 65°    | 819.2  | 844.2  | 860.1  | 826.3  | 798.8  |
| 67.5°  | 680.4  | 711.3  | 730.4  | 694.0  | 663.0  |
| 70°    | 584.4  | 619.4  | 640.6  | 604.1  | 569.1  |
| 72.5°  | 500.7  | 539.7  | 556.9  | 522.4  | 487.5  |
| 75°    | 377.7  | 412.6  | 433.9  | 404.9  | 367.5  |
| 77.5°  | 268.0  | 300.9  | 318.5  | 293.3  | 262.4  |
| 80°    | 196.5  | 231.4  | 245.0  | 224.0  | 199.1  |
| 82.5°  | 139.3  | 168.3  | 177.6  | 165.0  | 148.0  |
| 85°    | 63.8   | 83.8   | 94.4   | 89.2   | 84.2   |
| 87.5°  | 17.4   | 33.3   | 44.9   | 45.5   | 47.5   |
| 90°    | 5.1    | 15.1   | 30.7   | 33.3   | 33.3   |
| 92.5°  | 62.4   | 220.5  | 436.0  | 209.9  | 145.8  |
| 95°    | 143.3  | 511.0  | 1540.2 | 787.6  | 545.0  |
| 97.5°  | 228.7  | 585.0  | 2415.7 | 2018.1 | 1521.8 |
| 100°   | 294.2  | 614.4  | 2694.1 | 2818.8 | 2338.5 |
| 102.5° | 357.7  | 655.9  | 2786.2 | 3418.4 | 3024.1 |
| 105°   | 468.2  | 728.4  | 2799.0 | 4187.5 | 3929.8 |
| 107.5° | 572.6  | 804.7  | 2679.8 | 4582.7 | 4649.3 |
| 110°   | 642.2  | 862.3  | 2571.3 | 4705.4 | 4948.1 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 715.9  | 920.0  | 2466.9 | 4678.3 | 5077.1 |
| 115°   | 826.4  | 1011.5 | 2330.8 | 4503.6 | 5093.9 |
| 117.5° | 927.2  | 1100.8 | 2225.4 | 4224.7 | 4882.1 |
| 120°   | 992.7  | 1160.3 | 2172.2 | 4024.5 | 4699.9 |
| 122.5° | 1050.0 | 1215.6 | 2133.3 | 3819.8 | 4493.2 |
| 125°   | 1128.3 | 1295.9 | 2092.8 | 3537.2 | 4162.7 |
| 127.5° | 1203.5 | 1368.6 | 2067.3 | 3288.1 | 3846.4 |
| 130°   | 1248.5 | 1413.6 | 2057.0 | 3145.3 | 3635.6 |
| 132.5° | 1293.6 | 1456.7 | 2046.8 | 3019.5 | 3469.8 |
| 135°   | 1358.6 | 1516.2 | 2034.0 | 2853.6 | 3231.4 |
| 137.5° | 1420.5 | 1571.6 | 2027.3 | 2712.9 | 3023.1 |
| 140°   | 1463.5 | 1608.5 | 2021.2 | 2626.3 | 2906.4 |
| 142.5° | 1508.5 | 1643.6 | 2017.1 | 2545.4 | 2781.6 |
| 145°   | 1570.9 | 1693.5 | 2008.4 | 2439.8 | 2619.9 |
| 147.5° | 1638.5 | 1745.0 | 1999.7 | 2350.9 | 2492.5 |
| 150°   | 1683.5 | 1776.0 | 1995.6 | 2295.1 | 2412.6 |
| 152.5° | 1724.4 | 1805.0 | 1993.6 | 2249.5 | 2345.1 |
| 155°   | 1783.3 | 1848.3 | 1990.5 | 2189.1 | 2259.1 |
| 157.5° | 1834.9 | 1885.5 | 1991.0 | 2146.6 | 2193.6 |
| 160°   | 1867.7 | 1910.2 | 1993.1 | 2121.8 | 2156.8 |
| 162.5° | 1896.3 | 1930.9 | 1995.1 | 2101.1 | 2126.1 |
| 165°   | 1934.2 | 1956.7 | 1998.2 | 2077.7 | 2087.7 |
| 167.5° | 1964.9 | 1977.9 | 2000.7 | 2059.7 | 2063.7 |
| 170°   | 1985.4 | 1990.4 | 2000.7 | 2049.3 | 2049.3 |
| 172.5° | 1997.7 | 1998.7 | 2002.8 | 2039.1 | 2039.1 |
| 175°   | 2011.0 | 2008.5 | 2000.7 | 2028.8 | 2023.8 |
| 177.5° | 2016.6 | 2012.6 | 2002.3 | 2018.6 | 2014.5 |
| 180°   | 2008.4 | 2008.4 | 2008.4 | 2008.4 | 2008.4 |

(END OF REPORT)